

Citius, Altius, Fortius

The current future development trends in the large truck mounted platform market may be summed up by the Olympic motto 'Citius, Altius, Fortius' roughly translated as Swifter, Higher and Stronger. We take a look at the market and recent developments, concentrating particularly on the new 50 metre sector which is fast becoming something of an everyday machine, rather than an exotic large lift.

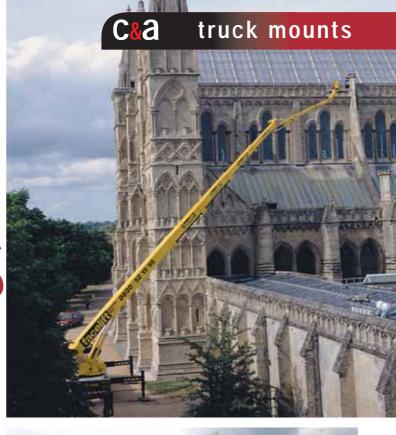
A few months ago we reviewed the rapidly developing small truck mounted lift market - platforms mounted on 3.5 tonne chassis and smaller - which has gone from strength to strength in recent years. Manufacturers in this sector have been pushing the performance envelope with some amazing developments, working heights have grown to a dizzy 27 metres, while several machines offer customers alternative concepts to the traditional small truck mounted lifts.

Surprisingly, large truck mounted platforms - those with working heights of 50 metres and above have been enjoying a busy two or three years, with good sales volumes and some significant new product developments. Whether this recent rise in demand is a result of the need to improve safety, speed

and efficiency while working at these sorts of heights, or that traditional methods to reach these heights have become more expensive, is unclear. Increased availability from local, regional and national rental companies which have all been steadily adding larger machines must surely be a factor. The truck mounted lift was arguably the first form of powered access to appear on the market - dating back to the 1920s - and they can be found in every country, even places where powered access has yet to make any impact. From the beginning and even now for larger platforms, the rental model is very similar to that for mobile cranes, with an operator always supplied with the product and most contracts being short term.

Their popularity and use was initially driven by demand from utility







owned by Abilene High Lift in Texas, USA

companies, fire departments, high rise inspection work and local authorities for lighting and tree trimming applications. Those applications still dominate the market, but have been augmented by a dramatic rise in demand from wind farms and a steady flow of work for television coverage of major sporting and national events and cleaning work.

Jack of all trades

As with most other types of equipment range and performance have increased substantially over the years. Not so long ago the 34 metre was the standard mid-range platform. This was superseded by the 45/46 metre on an 18 tonne chassis but the latest 50 metre machines on 26 tonne chassis look set to push this still higher. The increased working heights and outreach combined with more compact stowed/travel dimensions not to mention the availability of all-wheel drive chassis options allows these platforms to work in city centres and congested areas, as well as working on pylons and wind turbines.

As such the new crop of 50 metre machines are fast becoming the new 'jack of all trades' and users and rental companies are quickly realising their advantages. While they are clearly more expensive than their 40 to 46 metre cousins, their advantages can be turned into better rates and better utilisation which ultimately converts to a better overall return on capital and therefore more than worth the extra investment.

Whether the new batch of 60 metre machines that are expected (Bronto will unveil a 60 + metre machine at Bauma) have as much impact on the market remains to be seen. They will of course help fill out the 50 to 70 metre gap bringing the latest technology and improved working envelopes. And if that is not enough, the extra five to 10 metres of working height is handy for contracts involving pylons and wind farm work. In the meantime, the latest batch of 50 metre platforms has the perfect blend of height, reach, manoeuvrability and cost and this is reflected in their rapidly increasing numbers.

SAIE





What to look for?

Whether experienced or inexperienced there are certain things to look out for when comparing a machine's outreach, up and over reach, outrigger spread and chassis weight or size.



Outrigger spread and whether a platform has variable jacking or not is often overlooked. Outreach is usually measured from the centerline of rotation so a larger outrigger spread potentially reduces usable outreach. When setting up in confined areas - next to a wall or obstruction - variable jacking is a great feature. The best solution is the totally flexible jacking configuration that some machines are now equipped with, where each leg' can be extended to fit the space allowed by the location even asymmetrically - with the platform capacity and working envelope automatically modified by the machine to match the footprint.

t is also worth checking the way the 'up and over' height and putreach is measured as it is not always consistent between models, et alone manufacturers. Heaven forbid a manufacturer would try to maximise this figure! Working putreach should allow for a 'normal' person's arms (usually half a metre) put these are sometimes stretched to freak show proportions. Basket position is also a trick with some manufacturers measuring outreach from a fully rotated platform which n some cases can add a metre or so to the figure, while others do not. Just make sure you are comparing apples with apples.

Two main manufacturers?

When it comes to the largest machines most European buyers narrow their choice down to two main manufacturers – Palfinger Platforms of Germany and Finnish producer Bronto Skylift. There are of course several other manufacturers, even when it comes to 100 metres, with Ruthmann still offering its two large TTS semi-trailer units with working heights of 84 and 100 metres and the best outreach in the sector, but they have never been popular with only two sales in Europe since their launch in 2001.

Several Italian producers the masters of the smaller truck mounted platforms - also offer extensive ranges of larger models. Multitel has six machines over 50 metres, its largest being the 75 metre MJ750, while Oil&Steel has platforms up to 62 metres, Barin has a 90 metre and Cela now offers a 55 metre lift and there are also several products from CTE and Socage which is currently developing a significant line up based on two or three base models. When it comes to the larger machines however the mounted lift manufacturing is unclear. Although the absence of a non operated rental network may have played an historical role. Where the non-operated rental sector was established, selfpropelled lifts flourished and where there was no such service, truck mounted lifts did better - with local manufacturers setting up to satisfy the demand. Other minor factors that may have had an impact include the fact Italy did not allow a platform to be driven once raised, and pulling trailers was not practical or permitted, so trailer lifts never took off and delivery costs for small scissors and booms was prohibitive. Driving a platform at height in Germany was also limited to eight metres until 1992, which may also have had an influence.

The Chinese factor

Almost every product feature we now write has a Chinese element. With a very small local market access equipment has yet to make an impact, although small locally produced truck mounted lifts are built in serious volumes, but they are very much limited to local market tastes. As with other market sectors this is changing and at



numbers sold outside of Italy or specific export markets have been underwhelming, although there are signs that this could be changing. While most northern European buyers are happy to source smaller truck mounted platforms from Italian producers benefiting from excellent prices and innovative designs, when it comes to much larger individual unit investment things change. They tend to feel safer with the German and Finnish suppliers where confidence in the manufacturer, its technical ability, parts and service backup and resale value particularly when investing around £1.5 million for the largest machines. Why certain countries - Germany and Italy - dominate the truck

Bauma China last November XCMG launched a 100 metre truck mounted lift on a six axle Mercedes Actros chassis. Although the unit was built specifically for fire fighting duties it features 27 metres of outreach and can handle the pressures associated with a platform mounted monitor. In terms of technology, the move from this unit to a regular 100 metre platform is easy, if required. Over the past few years China has become one of the world's leading wind energy producers which in itself will create a sizeable demand for the larger truck mounted lifts and you can be absolutely certain that once that demand grows they will not satisfy it from imports

Growth of the 100 metre

The growth of the 100 metre market – at least in Europe - is also impressive with around 20 units scattered around Europe - Finland, Holland, Belgium, Germany, France and Ireland – with just one in the UK, a Palfinger WT1000 operated by Blade Access. While 100 metre machines are frequently drafted into the UK market from Ireland – McNally, Holland-Riwal and Germany- Gardemann, there has been a reluctance from local companies to invest in this size of machine.

The 100 metre platform has been around for quite a few years – Ruthmann's TTS 100 was launched in 2001 but only the two launch machines were ever sold, while the 103 metre Wumag (now Palfinger) WT1000 launched six years later in September 2007 has done exceptionally well. Bronto produces the two largest truck mounted platforms – the 104 metre S104HLA and the 112 metre S112 HLA – but has only achieved a few sales in Europe for the 104 metre and even less for the fire rescue orientated 112 metre S112HLA which was developed for a specific contract.

At the moment demand is such that these big machines are best owned by companies that work internationally, as demand in most countries is still too limited to keep one unit fully occupied.





100 no, 90 yes

But while the 100 metre lifts have largely been limited to those who work internationally, the 90 metre sector has certainly expanded over the past year, particularly in the UK and leading the way is Ireland-based access rental company Easi UpLifts. It took delivery of its second Bronto S90HLA last May and at the same time ordered three more big Bronto's – a third 90 metre S90HLA plus two 70 metre Bronto S70XDT truck mounts. Easi UpLifts has a reputation for spotting a lucrative gap in a sector so many will be very interested in its latest foray into very large truck mounts. It emphasised and reinforced its intentions by launching its new specialist division for large truck mounts and spider lifts at Vertikal Days last June which will operate from depots in London and Manchester.





- **17 m** height
- Vertical trajectory

 Compact, powerful and highly productive!

www.hinowa.com • info@hinowa.com

5 Anniversary

ENA

NEW GLIGHTLIFT 17.75

Growing popularity

Latest company entering this growing group of large truck mounted rental companies is Scottish company Outreach which has invested £1.25 million in three new Palfinger platforms - a 45 metre, a 53 metre and 70 metre. The company says that the spend has created Scotland's largest independent truck mounted rental company and the 70 metre machine is currently the largest to be based in Scotland.

"This latest investment underlines our serious intent to grow our access division," said Gary Potts, managing director - sales and marketing. "Our experience over the past few years in this sector indicates there is real customer demand to hire specialist machines based in Scotland rather than incur the extra costs and time to bring them up from down south."

Latest developments

Most recent product introductions (and anticipated launches at Bauma) have been in the 50 to 75 metre range with several new models being introduced by Bronto and Ruthmann over the past 18 months. Palfinger – which acquired Wumag in 2008 and merged the brand a year later - has been relatively quiet on large truck mounted introductions, concentrating more on its smaller and specialist (the old Bison) product range rather than the larger models. It is being particularly coy about disclosing any information about its new 90 metre platform which we expect it to unveil at Bauma following news published in the newsletter from German rental company Gerken,

<image>

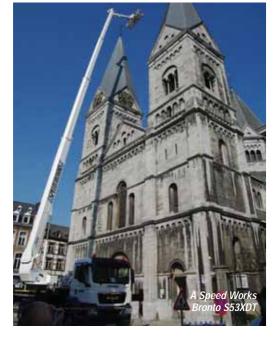
which claims to be the lead customer for the new lift. Apparently the new machine will be mounted on a 48 tonne MAN chassis with an up and over height of around 60 metres and a maximum outreach of 32 metres. Whether or not the new 90 metre replaces Palfinger's current 85 metre working height WT850, it will become the company's largest machine on a standard commercial chassis as the 103 metre WT1000 is mounted on a Faun crane carrier.

New Bronto 50s

Bronto latest platform is the S50 XDT-J (in addition to the S53 XDT launched about 20 months ago) and has already notched up a string of sales with many units delivered to the UK. According to Bronto, its major feature is its long telescopic articulated jib which is becoming a popular configuration with users, thanks to the combination of the advantages of the articulated HLA range with the telescopic XDT range. The company says it has no negative impact on its 700kg platform capacity or rigidity.

Sheffield, UK-based access rental company Elev8 took delivery of the UK's first S50 XDT-J mounted on a 26 tonne 6x4 MAN TGS 26.400 chassis and painted in a distinctive metallic bronze colour. The new lift was unveiled at Apex last September and features a three section main boom and three section telescopic articulated jib. It is capable of an up and over reach of 32 metres, where it offers 15.5 metres of outreach. Maximum outreach is 36 metres. Elev8 has specified the standard 700kg capacity platform and has also ordered a '360 degree camera cage' which includes a removable seat, hands-free safety brake and 300kg capacity CW300 platform mounted winch in order to increasing its versatility.

The MAN chassis includes a rear steering axle and Hydro-Drive – essentially giving four wheel steer and drive performance at speeds of less than 30kph – making the machine highly manoeuvrable and well suited for both off-road and inner city applications. With the recent success for Bronto in the UK





truck mounts



it has recently expanded its UK product support network by appointing Central Platform Services (CPS) of Pontefract, South Yorkshire to provide routine servicing to complete overhauls and remounting. CPS will operate as Bronto's service partner in the north of the UK while Thame-based repair and service company RE Foster will cover the south.

Ian James of Bronto said: "It is important that we have the right infrastructure in place to attend to service issues in a professional manner. This requires a special set of skills that are often difficult to find. CPS has been over to the factory and attended service training schools and we are now very pleased to formally announce a partnership."

Details of Bronto's latest 60 metre machine to be unveiled at Bauma are still scarce, but we understand it will be mounted on a three axle 26 tonne chassis and boast a



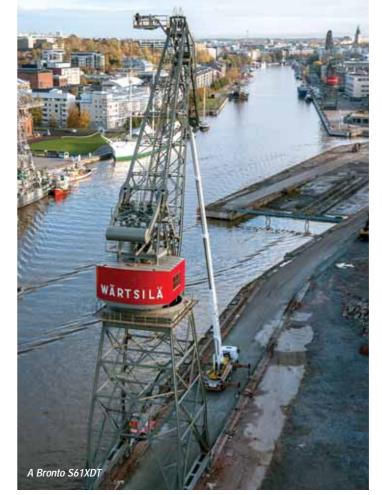
working height of 60 metres plus – this would make it the largest three axle truck mounted platform on the market. Bronto says that latest platform is part of a trend for more efficient products - i.e. being more productive (i.e. more working hours, height, outreach, basket capacity, mileage, etc.) with lower lifetime costs (less fuel consumption, maintenance, tax, etc.) and developing machines with more reach on smaller lighter trucks is fundamental to achieving that efficiency.

"We don't think that there are any disadvantages per se to this strategy," said Bronto's Jan Denks. "Obviously it is counterproductive if an imaginary advantage in productivity is achieved by sacrificing say, longevity. Past sins of manufacturers cutting corners when presenting "superior" performance products may have understandably scared some customers. Nevertheless, we are absolutely sure that the future will be, citing the Olympic motto, "Citius, Altius, Fortius" and Bronto works hard to ensure not only great performance, but also minimum lifetime cost."

Ruthmann joins the 50m club

Late last year Ruthmann – a company known for pushing the envelope - launched its 54 metre Steiger T540 - the second model in the company's 'height performance' range following the introduction of the 46 metre T460 at Intermat earlier in 2012. Ruthmann has also confirmed that the range is set to be topped with a 70 + metre model – again to be launched at Bauma. This launch is yet another sign of the growing demand for these 50 metre class platforms.

The design parameters for the T540 were set using customer and operator input at the early development stage and included greater outreach, articulating jib, longer upper boom, 600kg capacity and good off-road capability. The T540 shares almost three quarters of its components with its smaller brother - the T460 - however the lower boom, superstructure, rotary joint, chassis frame and jacking system have all been redesigned. There are numerous manufacturing and production advantages of using the same parts particularly shorter





development times, early predictable cost calculations and with larger component order volumes, lower overall costs.

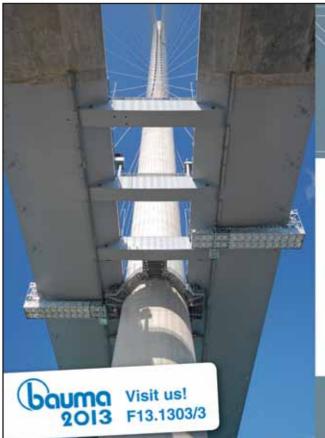
The T540 offers 54 metres of working height with its four section main boom, 16 metre top boom and 180 degree articulating jib. It can achieve a 40 metre outreach with a reduced platform capacity of 100kg. Again the platform is mounted on a three axle, 26 tonne chassis which can also be equipped with off-road capability. It offers a fully variable jacking system with a maximum spread of almost nine metres and joins the two Brontos and the Palfinger WT530 in this new 50-55 metre battleground.

Adding value

Several years ago the mention of a 'rental spec' machine would automatically imply a cheaper,

simpler or reduced specification item. This has totally changed over the past few years with regard to large truck mounted platforms. Rental companies - aware that these platforms must be able to carry out a multitude of tasks are now ordering very high spec machines, with davits, winches, different baskets, generators, lights, lockers and wash systems - the list goes on and on and most machines are now fitted with these when they leave the factory. Rental companies are also gaining from the rental rates charged for optional equipment.

For all types of access and lifting equipment, Bauma is THE show in everybody's calendar. If you are looking for the latest in large truck mounted platforms it will definitely be the place to be...



The dimension of accessibility

- Over 30 years experience in the field of bridge inspection equipment and special construction
- Platform and bucket type units for road or rail application with horizontal reaches under the bridge of over 25 m and possible loads of up to 1000 kg
- · Design and manufacturing of fix installed bridge maintenance gantries
- · Tunnel inspection equipment for road and rail application
- · Special design solutions for access problems of all kinds

MOOG GmbH Im Gewerbegebiet 8 88693 Deggenhausertal/Gem Tel. +49 7555 933-0 Fax +49 7555 93366 info@moog-online.de

www.moog-online.de

SIMPLICITY IS THE REAL INNOVATION

We design our aerial platforms following one fundamental principle: simplicity.

Easy to use, easy to maintain. Safe and reliable, they hold their value over the years.

And if that's not innovation...

Distributor for UK & IHL: King Highway Products Ltd. // sales/@kinghighway.co.uk // TeL +44 (0) 1858 467361 GSR SpA // Via Lea Giaccaglia, 5 // 47924 Rimini (RN) - Italy // TeL +39 0541 397811 // sales/@grspa.it // www.gsrspa.it

